

the arterioles. In a case of very severe convulsions of a child, after the failure of bromides and chloral, and when heroic treatment was certainly indicated, he injected one-fourth of a grain of morphine into the forearm, and applied five drops of nitrite of amyl on a handkerchief to the nose, producing at once a deep sleep, that lasted eight hours. To be on the safe side, he injected one one-hundred and eightieth of a grain of atropia as an antidote to the morphine. A rapid recovery ensued, but treatment with the bromides was continued.

The use of the atropia, in this case, very probably saved the child's life from the effects of the morphia, which, considering its age—sixteen months,—was altogether too heroic, in our opinion, for anything but an almost hopeless case. It may, nevertheless, have had an indispensable part in producing the general result of the recovery. The case is a good illustration of the therapeutic use of the antagonism of these two agents.

TREPHINING IN EPILEPSY.—In the *Archives Générale de Médecine* for December, 1878, Dr. Echeverria has published a *résumé* of the results of trephining in epilepsy, resulting from injuries of the skull. He has collected one hundred and forty-five cases of this operation. Of these, ninety-three were followed by recovery; eighteen by improvement; in five no change was produced; one was rendered worse; and death resulted in twenty-eight cases. The causes of death in the fatal cases, were extremely varied, viz.: suppuration over the whole surface of the brain, hemorrhage into the brain, under the seat of operation; gangrene of the membranes and cerebral abscess; obstinate hemorrhage of the superior longitudinal sinus; meningitis and meningo-encephalitis.

Dr. Echeverria gives the following *résumé* of the results of his analysis of the cases referred to:

Trepanation is the best means which can be employed in the treatment of epilepsy caused by injuries of the skull.

The immediate operation appears to be almost as successful as the late; fever forms a serious contra-indication to the operation. Insanity and paralysis justify the operation.

Trephining succeeds equally well when syphilitic products upon the bones of the skull, and which have proved rebellious to specific treatment, act as the cause of epilepsy.

The success of the operation depends, in great part, upon our ability to prevent irritation of the cerebral meninges.

It is, finally, advisable to keep the patient under anti-epileptic treatment for some time after the operation, in order to overcome the so-called epileptic habit of the nervous system.—*N. Y. Med. Record.*

DIGITALINE.—The following are the conclusions of a memoir by Guido Cavazzini, *Ann. d'Omoei*, 1878, t. 245, p. 115. (Abstr. in *Bull. Gén. de Thérap.*)

1. In frogs the action of digitaline is shown with great effect on the heart, particularly on the ventricle, in exciting the muscular fibres, the degree being in proportion to the dose employed.

2. One or two drops of the solution, according to the season, accelerate the movements; six or seven cause tetanus of the ventricle.

3. Digitaline increases the tonicity of the cardiac fibres, and thus slows the repetition of the contractions, reducing their number very decidedly.

4. The auricles are only slightly or not at all excited by digitaline; in them the systolic frequency does not undergo any diminution analogous to that of the ventricles; this is why the ventricular tonicity embarrasses the cardiac functions.

5. The ventricular diastole never seems aroused, but appears to be subordinate to the action of the auricular muscular fibres. The auricles may become filled to excess, to the point of being considerably distended, and subsequently paralyzed, which excludes the idea of activity.

6. The assertion of some physiologists, that the myocardium retains its blood during the systole, cannot be admitted; its pallor, clearly observed, is a direct proof to the contrary.

7. Digitaline, proportionally to the time of the experiment and the quantity employed, accelerates the peripheral circulation according to the augmentation of the impulsive force of the heart. As the retardation of the ventricular contractions and the ventricular tetanus occurs, the circulation first diminishes, then is arrested.

8. The capillary net-work slightly dilates, and nevertheless the circulation may be accelerated, provided that the medicine does not oppose itself to the diastolic extension and the rhythmic frequency of the ventricle.

9. It appears, therefore, that the action of digitaline localizes itself principally on the heart, and acts only secondarily on the vessels.

10. Digitaline appears to increase the faculty of absorbing oxygen in the respiratory substance.

11. The opinion of the Berlin school that digitaline in small doses is excitant, and in large doses depressant, is not borne out by experience. This substance always excites the cardiac tonicity and dilates the vessels; in toxic dose it causes tetanus and rupture of the heart.

12. *En résumé*, digitaline has the effect of remedying feebleness of the cardiac systole; it may assist the peripheral circulation by augmenting the *vis a tergo* and dilating the capillaries; it may be of service in disorders accompanied by insufficient oxidation of the blood.

THE TREATMENT OF NEURALGIA.—Dr. E. C. Seguin, *N. Y. Med. Rec.* Jan. 4, narrates three cases of severe chronic trigeminal neuralgia, one of which was successfully treated with gelsemium and Fowler's solution, while the other two were not relieved until Duquesnel's aconitia, in gradually increasing doses, was employed. He closes his account as follows:

It seems to me that three conclusions may legitimately be drawn from the above related cases.

1. That there is a possibility of relief in most severe cases of epileptiform trigeminal neuralgia. The usually received opinion is that, in such cases, recourse must be had to operation upon deep branches of the nerve, excision of Meckel's ganglion, etc., and to the systematic use of morphia to make life endurable. After my experience with the above cases, I am dis-